

ABSTRACT OF THE DISCLOSURE

Improved vanes of this invention are constructed for use within a variable geometry
5 turbocharger assembly. Each vane comprises an inner airfoil surface oriented adjacent a turbine
wheel, and an outer airfoil surface oriented opposite the inner airfoil surface. The inner and outer
airfoil surfaces define a vane airfoil thickness. Each vane includes a leading edge positioned
along a first inner and outer airfoil surface junction, a trailing edge positioned along a second
10 inner and outer surface junction, a hole disposed within a first axial vane surface substantially
parallel to an outer nozzle wall for receiving a respective post therein, and an actuation tab
extending from a second axial vane surface opposite from the first vane surface. A key feature
of improved vanes of this invention is that they have an airfoil thickness that is greater than 0.16
times a length of the vane as measured between the vane leading and trailing edges.

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